

6400  
4-18-01  
2280#2  
OIPERAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/782,953DATE: 03/12/2001  
TIME: 12:41:32Input Set : A:\UTSD674US.txt  
Output Set: N:\CRF3\03122001\I782953.raw

ENTERED

3 <110> APPLICANT: WILLIAMS, R. SANDERS  
 4 ROTHERMEL, BEVERLY  
 6 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO MUSCLE SELECTIVE  
 7 CALCINEURIN INTERACTING PROTEIN (MCIP)  
 9 <130> FILE REFERENCE: UTSD:674PZ1  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/782,953  
 12 <141> CURRENT FILING DATE: 2001-02-13  
 14 <150> PRIOR APPLICATION NUMBER: 60/216,601  
 15 <151> PRIOR FILING DATE: 2000-07-07  
 17 <160> NUMBER OF SEQ ID NOS: 27  
 19 <170> SOFTWARE: PatentIn Ver. 2.1  
 21 <210> SEQ ID NO: 1  
 22 <211> LENGTH: 599  
 23 <212> TYPE: DNA  
 24 <213> ORGANISM: Mus musculus  
 26 <400> SEQUENCE: 1  
 27 gaggtgcaaa ggaacctcca gcttgggctt gactgagaga gcgagtcgtt cgttaagcgt 60  
 28 ctgccccgtg aaaaaggcaga atgattttag ggacttttagc tacaattttt gctccctgat 120  
 29 tgcttgtgtg gcaaacgatg atgttttcag cgaaaggtag accagggcca aatttgaatc 180  
 30 cctcttcaga acatatgaca aggacaccac cttccagat tttaaagagct tcaaacgtgt 240  
 31 ccgataaaac ttccagcaacc ccttatctgc agccgatgcc aggcgtcgcc tgacacaagac 300  
 32 cgagttccctg gggaaaggaaa tgaaggtagt ttttgcctcaq actttacaca taggaagttc 360  
 33 acacctggct ccgcacatcc cgacaaacag ttccatcatct cccctccggc ctctccccc 420  
 34 gttggctgaa aacaaggtaga agatgccacc cccgtcataa attacgatct tttataatgcc 480  
 35 atctccaaggc tggggccagg agagaagttt gaaactgcattg cagcgacaga caccactccc 540  
 36 agtgtggctgg tccacgtgtg tgagagtgc caagagaatg aggaggaaga ggaagagat 599  
 39 <210> SEQ ID NO: 2  
 40 <211> LENGTH: 597  
 41 <212> TYPE: DNA  
 42 <213> ORGANISM: Mus musculus  
 44 <220> FEATURE:  
 45 <221> NAME/KEY: CDS  
 46 <222> LOCATION: (1)..(594)  
 48 <400> SEQUENCE: 2  
 49 atg gag gag gtg gat ctg cag gac ctg ccg agc gcc acc atc gcc tgc 48  
 50 Met Glu Glu Val Asp Leu Gln Asp Leu Pro Ser Ala Thr Ile Ala Cys  
 51 1 5 10 15  
 53 cac ctg gac ccg cgc gtg ttc gtg gac ggc ctg tgc cgg gcc aaa ttt 96  
 54 His Leu Asp Pro Arg Val Phe Val Asp Gly Leu Cys Arg Ala Lys Phe  
 55 20 25 30  
 57 gaa tcc ctc ttc aga aca tat gac aag gac acc acc ttc cag tat ttt 144  
 58 Glu Ser Leu Phe Arg Thr Tyr Asp Lys Asp Thr Thr Phe Gln Tyr Phe  
 59 35 40 45  
 61 aag agc ttc aaa cgt gtc cgg ata aac ttc agc aac ccc tta tct gca 192  
 62 Lys Ser Phe Lys Arg Val Arg Ile Asn Phe Ser Asn Pro Leu Ser Ala  
 63 50 55 60  
 65 gcc gat gcc agg ctg cgg ctg cac aag acc gag ttc ctg ggg aag gaa 240

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/782,953

DATE: 03/12/2001

TIME: 12:41:32

Input Set : A:\UTSD674US.txt

Output Set: N:\CRF3\03122001\I782953.raw

66	Ala	Asp	Ala	Arg	Leu	Arg	Leu	His	Thr	Glu	Phe	Leu	Gly	Lys	Glu		
67	65				70				75							80	
69	atg	aag	ttg	tat	ttt	gct	cag	act	tta	cac	ata	gga	agt	tca	cac	ctg	288
70	Met	Lys	Leu	Tyr	Phe	Ala	Gln	Thr	Leu	His	Ile	Gly	Ser	Ser	His	Leu	
71					85				90							95	
73	gct	ccg	ccc	aat	ccc	gac	aaa	cag	ttc	ctc	atc	tcc	cct	ccg	gcc	tct	336
74	Ala	Pro	Pro	Asn	Pro	Asp	Lys	Gln	Phe	Leu	Ile	Ser	Pro	Pro	Ala	Ser	
75					100				105							110	
77	cct	ccc	gtt	ggc	tgg	aaa	caa	gta	gaa	gat	gcc	acc	ccc	gtc	ata	aat	384
78	Pro	Pro	Val	Gly	Trp	Lys	Gln	Val	Glu	Asp	Ala	Thr	Pro	Val	Ile	Asn	
79					115				120							125	
81	tac	gat	ctt	tta	tat	gcc	atc	tcc	aag	ctg	ggg	cca	gga	gag	aag	tat	432
82	Tyr	Asp	Leu	Leu	Tyr	Ala	Ile	Ser	Lys	Leu	Gly	Pro	Gly	Glu	Lys	Tyr	
83					130				135							140	
85	gaa	ctg	cat	gca	gca	gac	ccc	act	ccc	agt	gtg	gtg	gtc	cac	gtg		480
86	Glu	Leu	His	Ala	Ala	Thr	Asp	Pro	Thr	Pro	Ser	Val	Val	Val	His	Val	
87	145				150				155							160	
89	tgt	gag	agt	gac	caa	gag	aat	gag	gag	gaa	gag	gaa	gag	atg	gag	aga	528
90	Cys	Glu	Ser	Asp	Gln	Glu	Asn	Glu	Glu	Glu	Glu	Glu	Glu	Met	Glu	Arg	
91					165				170							175	
93	atg	aag	aga	ccc	aag	ccc	aaa	atc	atc	cag	aca	cg	aga	ccg	gag	tac	576
94	Met	Lys	Arg	Pro	Lys	Pro	Lys	Ile	Ile	Gln	Thr	Arg	Arg	Pro	Glu	Tyr	
95					180				185							190	
97	aca	ccg	atc	cac	ctt	agc	tga										597
98	Thr	Pro	Ile	His	Leu	Ser											
99			195														
102	<210>	SEQ	ID	NO:	3												
103	<211>	LENGTH:	198														
104	<212>	TYPE:	PRT														
105	<213>	ORGANISM:	Mus	musculus													
107	<400>	SEQUENCE:	3														
108	Met	Glu	Val	Asp	Leu	Gln	Asp	Leu	Pro	Ser	Ala	Thr	Ile	Ala	Cys		
109	1				5				10							15	
111	His	Leu	Asp	Pro	Arg	Val	Phe	Val	Asp	Gly	Leu	Cys	Arg	Ala	Lys	Phe	
112					20				25							30	
114	Glu	Ser	Leu	Phe	Arg	Thr	Tyr	Asp	Lys	Asp	Thr	Thr	Phe	Gln	Tyr	Phe	
115					35				40							45	
117	Lys	Ser	Phe	Lys	Arg	Val	Arg	Ile	Asn	Phe	Ser	Asn	Pro	Leu	Ser	Ala	
118					50				55							60	
120	Ala	Asp	Ala	Arg	Leu	Arg	Leu	His	Lys	Thr	Glu	Phe	Leu	Gly	Lys	Glu	
121	65				70				75							80	
123	Met	Lys	Leu	Tyr	Phe	Ala	Gln	Thr	Leu	His	Ile	Gly	Ser	Ser	His	Leu	
124					85				90							95	
126	Ala	Pro	Pro	Asn	Pro	Asp	Lys	Gln	Ph	Leu	Ile	Ser	Pro	Pro	Ala	Ser	
127					100				105							110	
129	Pro	Pro	Val	Gly	Trp	Lys	Gln	Val	Glu	Asp	Ala	Thr	Pro	Val	Ile	Asn	
130					115				120							125	
132	Tyr	Asp	Leu	Leu	Tyr	Ala	Ile	Ser	Lys	Leu	Gly	Pro	Gly	Glu	Lys	Tyr	
133					130				135							140	

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/782,953

DATE: 03/12/2001

TIME: 12:41:32

Input Set : A:\UTSD674US.txt

Output Set: N:\CRF3\03122001\I782953.raw

135 Glu Leu His Ala Ala Thr Asp Pro Thr Pro Ser Val Val Val His Val  
 136 145 150 155 160  
 138 Cys Glu Ser Asp Gln Glu Asn Glu Glu Glu Glu Glu Met Glu Arg  
 139 165 170 175  
 141 Met Lys Arg Pro Lys Pro Lys Ile Ile Gln Thr Arg Arg Pro Glu Tyr  
 142 180 185 190  
 144 Thr Pro Ile His Leu Ser  
 145 195  
 149 <210> SEQ ID NO: 4  
 150 <211> LENGTH: 198  
 151 <212> TYPE: PRT  
 152 <213> ORGANISM: Mus musculus  
 154 <400> SEQUENCE: 4  
 155 Met Glu Glu Val Asp Leu Gln Asp Leu Pro Ser Ala Thr Ile Ala Cys  
 156 1 5 10 15  
 158 His Leu Asp Pro Arg Val Phe Val Asp Gly Leu Cys Arg Ala Lys Phe  
 159 20 25 30  
 161 Glu Ser Leu Phe Arg Thr Tyr Asp Lys Asp Thr Thr Phe Gln Tyr Phe  
 162 35 40 45  
 164 Lys Ser Phe Lys Arg Val Arg Ile Asn Phe Ser Asn Pro Leu Ser Ala  
 165 50 55 60  
 167 Ala Asp Ala Arg Leu Arg Leu His Lys Thr Glu Phe Leu Gly Lys Glu  
 168 65 70 75 80  
 170 Met Lys Leu Tyr Phe Ala Gln Thr Leu His Ile Gly Ser Ser His Leu  
 171 85 90 95  
 173 Ala Pro Pro Asn Pro Asp Lys Gln Phe Leu Ile Ser Pro Pro Ala Ser  
 174 100 105 110  
 176 Pro Pro Val Gly Trp Lys Gln Val Glu Asp Ala Thr Pro Val Ile Asn  
 177 115 120 125  
 179 Tyr Asp Leu Leu Tyr Ala Ile Ser Lys Leu Gly Pro Gly Glu Lys Tyr  
 180 130 135 140  
 182 Glu Leu His Ala Ala Thr Asp Pro Thr Pro Ser Val Val His Val  
 183 145 150 155 160  
 185 Cys Glu Ser Asp Gln Glu Asn Glu Glu Glu Glu Glu Met Glu Arg  
 186 165 170 175  
 188 Met Lys Arg Pro Lys Pro Lys Ile Ile Gln Thr Arg Arg Pro Glu Tyr  
 189 180 185 190  
 191 Thr Pro Ile His Leu Ser  
 192 195  
 195 <210> SEQ ID NO: 5  
 196 <211> LENGTH: 597  
 197 <212> TYPE: DNA  
 198 <213> ORGANISM: Mus musculus  
 200 <220> FEATURE:  
 201 <221> NAME/KEY: CDS  
 202 <222> LOCATION: (1)..(594)  
 204 <400> SEQUENCE: 5  
 205 atg gat ttt agg gac ttt agc tac aat ttt agc tcc ctg att gct tgt 48  
 206 Met Asp Phe Arg Asp Phe Ser Tyr Asn Phe Ser Ser Leu Ile Ala Cys

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/782,953

DATE: 03/12/2001  
 TIME: 12:41:32

Input Set : A:\UTSD674US.txt  
 Output Set: N:\CRF3\03122001\I782953.raw

207	1	5	10	15														
209	gtg	gca	aac	gat	gat	gtc	ttc	agc	gaa	agt	gag	acc	agg	gcc	aaa	ttt	96	
210	Val	Ala	Asn	Asp	Asp	Val	Phe	Ser	Glu	Ser	Glu	Thr	Arg	Ala	Lys	Phe		
211	20					25					30							
213	gaa	tcc	ctc	ttc	aga	aca	ata	tat	gac	aag	gac	acc	acc	ttc	cag	tat	ttt	144
214	Glu	Ser	Leu	Phe	Arg	Thr	Tyr	Asp	Lys	Asp	Thr	Thr	Phe	Gln	Tyr	Phe		
215	35					40					45							
217	aag	agc	ttc	aaa	cgt	gtc	cg	ata	aac	ttc	agc	aac	ccc	tta	tct	gca		192
218	Lys	Ser	Phe	Lys	Arg	Val	Ile	Asn	Phe	Ser	Asn	Pro	Leu	Ser	Ala			
219	50					55					60							
221	gcc	gat	gcc	agg	ctg	cg	ctg	cac	aag	acc	gag	ttc	ctg	ggg	aag	gaa		240
222	Ala	Asp	Ala	Arg	Leu	Arg	Leu	His	Lys	Thr	Glu	Phe	Leu	Gly	Lys	Glu		
223	65					70					75			80				
225	atg	aag	ttg	tat	ttt	gtc	cag	act	tta	cac	ata	gga	agt	tca	cac	ctg		288
226	Met	Lys	Leu	Tyr	Phe	Ala	Gln	Thr	Leu	His	Ile	Gly	Ser	Ser	His	Leu		
227	85					90					95							
229	gct	ccg	ccc	aat	ccc	gac	aaa	cag	ttc	ctc	atc	tcc	cct	ccg	gcc	tct		336
230	Ala	Pro	Pro	Asn	Pro	Asp	Lys	Gln	Phe	Leu	Ile	Ser	Pro	Pro	Ala	Ser		
231	100					105					110							
233	cct	ccc	gtt	ggc	tgg	aaa	caa	gta	gaa	gat	gcc	acc	ccc	gtc	ata	aat		384
234	Pro	Pro	Val	Gly	Trp	Lys	Gln	Val	Glu	Asp	Ala	Thr	Pro	Val	Ile	Asn		
235	115					120					125							
237	tac	gat	ctt	tta	tat	gcc	atc	ttc	aag	ctg	ggg	cca	gga	gag	aag	tat		432
238	Tyr	Asp	Leu	Leu	Tyr	Ala	Ile	Ser	Lys	Leu	Gly	Pro	Gly	Glu	Lys	Tyr		
239	130					135					140							
241	gaa	ctg	cat	gca	g	cc	aca	gac	ccc	act	ccc	agt	gtg	gtg	gtc	cac	gtg	480
242	Glu	Leu	His	Ala	Ala	Thr	Asp	Pro	Thr	Pro	Ser	Val	Val	Val	His	Val		
243	145					150					155			160				
245	tgt	gag	agt	gac	caa	gag	aat	gag	gag	gaa	gag	gag	atg	gag	aga		528	
246	Cys	Glu	Ser	Asp	Gln	Glu	Asn	Glu	Met	Glu	Arg							
247	165					170					175							
249	atg	aag	aga	ccc	aag	ccc	aaa	atc	atc	cag	aca	cg	aga	ccg	gag	tac		576
250	Met	Lys	Arg	Pro	Lys	Pro	Lys	Ile	Ile	Gln	Thr	Arg	Arg	Pro	Glu	Tyr		
251	180					185					190							
253	aca	ccg	atc	cac	ctt	agc	tga										597	
254	Thr	Pro	Ile	His	Leu	Ser												
255	195																	
258	<210>	SEQ	ID	NO:	6													
259	<211>	LENGTH:	198															
260	<212>	TYPE:	PRT															
261	<213>	ORGANISM:	Mus musculus															
263	<400>	SEQUENCE:	6															
264	Met	Asp	Phe	Arg	Asp	Phe	Ser	Tyr	Asn	Phe	Ser	Ser	Leu	Ile	Ala	Cys		
265	1	5				10					15							
267	Val	Ala	Asn	Asp	Asp	Val	Phe	Ser	Glu	Ser	Glu	Thr	Arg	Ala	Lys	Phe		
268	20					25					30							
270	Glu	Ser	Leu	Phe	Arg	Thr	Tyr	Asp	Lys	Asp	Thr	Thr	Phe	Gln	Tyr	Phe		
271	35					40					45							
273	Lys	Ser	Phe	Lys	Arg	Val	Arg	Ile	Asn	Phe	Ser	Asn	Pro	Leu	Ser	Ala		

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/782,953

DATE: 03/12/2001

TIME: 12:41:33

Input Set : A:\UTSD674US.txt

Output Set: N:\CRF3\03122001\I782953.raw

274	50	55	60													
276	Ala	Asp	Ala	Arg	Leu	Arg	Leu	His	Lys	Thr	Glu	Phe	Leu	Gly	Lys	Glu
277	65				70				75							80
279	Met	Lys	Leu	Tyr	Phe	Ala	Gln	Thr	Leu	His	Ile	Gly	Ser	Ser	His	Leu
280						85				90						95
282	Ala	Pro	Pro	Asn	Pro	Asp	Lys	Gln	Phe	Leu	Ile	Ser	Pro	Pro	Ala	Ser
283						100			105							110
285	Pro	Pro	Val	Gly	Trp	Lys	Gln	Val	Glu	Asp	Ala	Thr	Pro	Val	Ile	Asn
286						115			120							125
288	Tyr	Asp	Leu	Leu	Tyr	Ala	Ile	Ser	Lys	Leu	Gly	Pro	Gly	Glu	Lys	Tyr
289						130			135							140
291	Glu	Leu	His	Ala	Ala	Thr	Asp	Pro	Thr	Pro	Ser	Val	Val	Val	His	Val
292	145					150				155						160
294	Cys	Glu	Ser	Asp	Gln	Glu	Asn	Glu	Glu	Glu	Glu	Glu	Glu	Met	Glu	Arg
295						165			170							175
297	Met	Lys	Arg	Pro	Lys	Pro	Lys	Ile	Ile	Gln	Thr	Arg	Arg	Pro	Glu	Tyr
298						180			185							190
300	Thr	Pro	Ile	His	Leu	Ser										
301						195										
305	<210>	SEQ	ID	NO:	7											
306	<211>	LENGTH:	198													
307	<212>	TYPE:	PRT													
308	<213>	ORGANISM:	Mus	musculus												
310	<400>	SEQUENCE:	7													
311	Met	Asp	Phe	Arg	Asp	Phe	Ser	Tyr	Asn	Phe	Ser	Ser	Leu	Ile	Ala	Cys
312	1					5				10						15
314	Val	Ala	Asn	Asp	Asp	Val	Phe	Ser	Glu	Ser	Glu	Thr	Arg	Ala	Lys	Phe
315						20			25							30
317	Glu	Ser	Leu	Phe	Arg	Thr	Tyr	Asp	Lys	Asp	Thr	Thr	Phe	Gln	Tyr	Phe
318						35			40							45
320	Lys	Ser	Phe	Lys	Arg	Val	Arg	Ile	Asn	Phe	Ser	Asn	Pro	Leu	Ser	Ala
321						50			55							60
323	Ala	Asp	Ala	Arg	Leu	Arg	Leu	His	Lys	Thr	Glu	Phe	Leu	Gly	Lys	Glu
324						65			70			75				80
326	Met	Lys	Leu	Tyr	Phe	Ala	Gln	Thr	Leu	His	Ile	Gly	Ser	Ser	His	Leu
327						85			90			95				
329	Ala	Pro	Pro	Asn	Pro	Asp	Lys	Gln	Phe	Leu	Ile	Ser	Pro	Pro	Ala	Ser
330						100			105			110				
332	Pro	Pro	Val	Gly	Trp	Lys	Gln	Val	Glu	Asp	Ala	Thr	Pro	Val	Ile	Asn
333						115			120			125				
335	Tyr	Asp	Leu	Leu	Tyr	Ala	Ile	Ser	Lys	Leu	Gly	Pro	Gly	Glu	Lys	Tyr
336						130			135			140				
338	Glu	Leu	His	Ala	Ala	Thr	Asp	Pro	Thr	Pro	Ser	Val	Val	Val	His	Val
339						145			150			155				160
341	Cys	Glu	Ser	Asp	Gln	Glu	Asn	Glu	Glu	Glu	Glu	Glu	Glu	Met	Glu	Arg
342						165			170			175				
344	Met	Lys	Arg	Pro	Lys	Pro	Lys	Ile	Ile	Gln	Thr	Arg	Arg	Pro	Glu	Tyr
345						180			185			190				
347	Thr	Pro	Ile	His	Leu	Ser										

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/782,953

DATE: 03/12/2001

TIME: 12:41:34

Input Set : A:\UTSD674US.txt

Output Set: N:\CRF3\03122001\I782953.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number